

IN THE CLAIMS:

Amendments to the Claims

Please amend claims 1, 12, 13, 21 - 25 and add the new claims 26 - 31 as shown below, please cancel claim 9 without prejudice or disclaimer of the subject matter thereof and please cancel claims 15 - 20 which stand withdrawn from consideration without prejudice to the filing of a divisional application directed thereto.

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A liquid crystal display device for displaying video data, comprising:

a detection circuit for detecting a luminance distribution in one frame period, the luminance distribution being indicative of generation frequency of gradations in each of a plurality of divided regions, each divided region including a plurality of gradations based on the video data which is inputted,

a determination circuit for determining a divided region of higher generation frequency of gradation than that all of other divided regions based on the luminance distribution in one frame period,

a memory for delaying the video data which is inputted by one frame period,

a correction circuit for correcting the video data which is delayed by one frame period so as to make a luminance characteristic of the divided region of higher generation frequency of gradation more abrupt than a luminance characteristic of the other divided regions, and

a display panel for displaying the corrected video data.

Claims 2-11 (canceled)

12. (currently amended) A liquid crystal display device according to claim 1, wherein the detection circuit comprises:

a detection setting section for setting a detection period,
a divisional number setting section for setting a divisional number for the divided regions, and
a luminance distribution detection section for accumulating the generation frequency of gradations in each divided region divided by the divisional number set by the divisional number setting section during the detection period set by the detection setting section.

13. (currently amended) A liquid crystal display device according to claim 1, wherein the device further comprises a gradation correction coefficient generation section for calculating a correction coefficient in each divided region based on the luminance distribution detected by the detection circuit.

Claims 14 - 20 (canceled)

21. (currently amended) A liquid crystal display device according to claim 1, wherein the correction circuit increases output gradation number against input gradation number of the divided region of higher generation frequency of gradation more than output gradation number against input gradation number of the other divided regions.

22. (currently amended) A liquid crystal display device according to claim 1, wherein the correction circuit corrects the video data to emphasize contrast of the divided region of higher generation frequency of gradation more than contrast of the other divided regions.

23. (currently amended) A liquid crystal display device according to claim 1, further comprising:

a data driver for outputting to the display panel a driving voltage corresponding to the corrected video data; and

a scan driver for outputting to the display panel a scanning voltage for enabling the display panel to display the corrected video data;

wherein the display panel displays the corrected video data based on the driving voltage and the scanning voltage.

24. (currently amended) A liquid crystal display device for displaying video data, comprising:

a detection circuit for detecting a luminance distribution in one frame period, the luminance distribution being indicative of generation frequency of gradations in each of a plurality of divided regions, each divided region including a plurality of gradations based on the video data which is inputted;

a determination circuit for determining a divided region of higher generation frequency of gradation than that all of other divided regions based on the luminance distribution in one frame period;

a memory for delaying the video data which is inputted by one frame period;

a correction circuit for correcting the video data which is delayed by one frame period by increasing an output gradation number against an input gradation number of the divided region of higher generation frequency of gradation more than an output gradation number against an input gradation number of other divided regions; and

a display panel for displaying the corrected video data.

25. (currently amended) A liquid crystal display device for displaying video data, comprising:

a detection circuit for detecting a luminance distribution in one frame period, the luminance distribution being indicative of generation frequency of gradations in each of a plurality of divided regions, each divided region including a plurality of gradations based on the video data which is inputted;

a determination circuit for determining a divided region of higher generation frequency of gradation than that all of other divided regions based on the luminance distribution in one frame period;

a memory for delaying the video data which is inputted by one frame period;

a correction circuit for correcting the video data which is delayed by one frame period so as to emphasize contrast of the divided region of higher generation frequency of gradation more than contrast of the other divided regions; and

a display panel for displaying the corrected video data.

26. (new) A liquid crystal display device according to claim 1, wherein the correction circuit makes a luminance characteristic of a divided region adjacent the divided region of higher generation frequency of gradation more smooth and maintains a luminance characteristic other divided regions.

27. (new) A liquid crystal display device according to claim 1, further comprising a setting section for setting a value for determining a range of luminance for each divided region.

28. (new) A liquid crystal display device according to claim 27, wherein intervals between two adjacent values are unequal.

29. (new) A liquid crystal display device according to claim 28, wherein the value is set according to light transmission of liquid crystal of the display panel.

30. (new) A liquid crystal display device according to claim 27, wherein the intervals between two adjacent values for higher or lower luminance are larger than the intervals between two adjacent values for intermediate luminance.

31. (new) A liquid crystal display device according to claim 30, wherein the value is set according to light transmittance of liquid crystal of the display panel.